REMARKS

This communication responds to the Office Action dated on December 9, 2009. Claims 1, 17, 33, 49, and 81-83 are amended. Claims 13, 15, 18, 34, 52, and 65-80 were previously canceled, and claims 7, 8, 16, 20, 21, 27, 28, 36, 37, 43, 44, 51, 59, and 60 are presently canceled. Claims 84 and 85 are added. As a result, claims 1-6, 9-12, 14, 17, 19, 22-26, 29-33, 35, 38-42, 45-50, 53-58, 61-64, and 81-85 are now pending in this application. Support for the added limitations in amended independent claims 1, 17, 33, 49, and 81-83 and new claims 84 and 85 may be found in the as-filed specification, for example, at FIG. 1, paragraphs [0021]-[0025] and original claim 81. Thus, Applicants respectfully assert that no new matter has been added.

Claim Objection

Claims 8, 27, 43, and 60 were objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. As noted earlier, claims 8, 27, 43, and 60 have been canceled. Thus, the objection to claims 8, 27, 43, and 60 is moot.

§ 112 Rejection of the Claims

Claims 1-6, 9-12, 14, 17, 19, 22-26, 29-33, 35, 38-42, 45-50, 53-58, 61-64, and 81-83 were rejected under 35 U.S.C. § 112, first paragraph. Applicants respectfully traverse the rejections.

The Office Action stated, at p. 4, paragraph 6, last four lines, that "[i]t is unclear whether the same acquiring the address registration information from the router when the message is received at the router from the switch, accessing, and building, performs mapping the network of routers, as required by claim language." The Office Action also stated, at p. 5, first paragraph, that "it is also unclear whether "accessing the MIB associated with other switches" … suggests that all other switches are sharing the same MIB or each switch has a corresponding MIB of its own." Independent claim 1 has been amended to recite "the local area network management system uses the address registration information in mapping the network of switches by

accessing each switch in the network of switches" and "accessing other MIBs, each of the other
MIBs associated with one of other switches of the network of switches."

The Office Action stated, at p. 5, third paragraph, that "[a]s to claim[s] 14 … these
limitations are ambiguous because they appear to contradict the express teaching of independent
claim 1." As noted above, independent claim 1 has been amended to recite "the local area
network management system uses the address registration information in mapping the network of
switches by accessing each switch in the network of switches." Accordingly, the limitation of
"the local area network management system configures the network of switches" recited in claim
14 does not contradict the limitation of "the local are network management system … mapping
the network of switches" recited in amended independent claim 1.

The Office Action stated, at p. 5, fourth paragraph, that "[a]s to claims 17, 33, 49, and 81-
83, it is unclear whether "accessing the MIB associated with other switches/routers" … suggests
that all other switches/routers are sharing the same MIB or each switch/router has a
corresponding MIB of its own." Independent claims 17, 33, and 81 have been amended to recite
"accessing other MIBs, each of the other MIBs associated with one of other routers of the router
network." Independent claims 49 and 81-83 have been amended to recite "accessing other
MIBs, each of the other MIBs associated with one of other switches of the switch network."

The Office Action stated, at p. 6, first paragraph, that "[a]s to claims 19, 35 … it is
unclear how the router network is configured using the same WNS, as per claim 19."
Independent claim 17 has been amended to recite "mapping … the router network from a wide
area network management system controlling the switch network." Similar elements are recited
in amended independent claim 33. Accordingly, the limitation of "configuring the router
network using the wide area network management system" recited in claims 19 and 35 does not
contradict the limitation of "mapping … the router network from a wide area network
management system controlling the switch network" recited in amended independent claims 17
and 33.

The Office Action stated, at p. 6, third paragraph, that "[a]s to claim 81, it is unclear how
the step of "configuring the router network using the wide area network management system" is
interconnected with other claim steps." Independent claim 81 has been amended to recite, in
pertinent part:

> mapping, using the address registration information, the router
> network from the wide area network management system when the
> message is received at the switch from the router, wherein the
> mapping the router network from the wide area network
> management system comprises: … building a map of entire routers
> of the router network based upon accessing each of the other
> routers;
>
> configuring the router network using the wide area network
> management system when the map of entire routers of the router
> network is built from the wide area network management system.

Accordingly, amended independent claim 81 clearly shows that the limitation of "configuring the
router network using the wide area network management system" is connected with the mapping
of the router network from the wide area network management system.

For at least the reasons stated above, Applicants respectfully submit that amended
independent claims 1, 17, 33, 49, and 81-83 and their respective dependent claims 2-6, 9-12, 14,
19, 22-26, 29-32, 35, 38-42, 45-48, 50, 53-58, and 61-64 particularly point out and distinctly
claim the subject matter which Applicants regard as the invention. Applicants therefore
respectfully request that the rejection of claims 1-6, 9-12, 14, 17, 19, 22-26, 29-33, 35, 38-42,
45-50, 53-58, 61-64, and 81-83 under 35 U.S.C. § 112 be reconsidered and withdrawn.

Claims 7, 16, 20, 28, 36, 44, 51, and 59 have canceled, as noted earlier. Thus, the
rejection of claims 7, 16, 20, 28, 36, 44, 51, and 59 under 35 U.S.C. § 112 is moot.

§ 103 Rejections of the Claims

Claims 1-6, 9-12, 14, 17, 19, 22-26, 29-33, 35, 38-42, 45-50, 53-58, 61-64, and 81-83
were rejected under 35 U.S.C. § 103(a) in view of Crooks (U.S. Pub. No. 2002/0055988,
hereinafter "Crooks") and Non-Patent Literature document titled "Integrated Local Management
Interface (ILMI) Specification, Version 4.0" (hereinafter "ILMI Spec"). Applicants respectfully
traverse the rejections.

Independent claims 1, 17, 33, 49, and 81-83 have been amended to clarify the meaning of
the claim language. For example, amended claim 1 recites, in pertinent part:

> the wide area network management system separate from the local
> area network management system;
>
> address registration information to be appended to a message sent
> between a router of the network of routers and a switch of the
> network of switches over a connection between the router and the
> switch … ; [and]
>
> acquiring the address registration information from the router when
> the message is received at the router from the switch,

Similar elements are recited in Applicants' other independent claims 17, 33, 49, and 81-83.
Applicants respectfully submit that neither Crooks nor ILMI Spec, alone or in combination,
teaches or suggests the above-quoted elements of amended claim 1.

The Office Action stated, at 8, second paragraph, that "Crooks does not show that the
address registration information is appended to a message sent between a router of the network
of routers and a switch of the network of switches." Applicants agree with the admission of the
Office Action. The Office Action relied exclusively on ILMI Spec and stated, at p. 8, third and
fourth paragraphs, that ILMI Spec shows "address registration information (section 9 at page 60)
to be appended to a message (ILMI message) sent between a router (first ATM device) and a
switch (second ATM device) (Fig. 1 at page 3) over a connection between the router and the
switch (page 1, under section Scope; ILMI communication takes place between adjacent IMEs
over physical links or virtual links)." Applicants respectfully disagree that ILMI Spec teaches or
suggests the above-quoted claimed elements.

ILMI Spec discusses communication between "Public Network ATM switch" and
"Private Network ATM switch" (or between two "Private Network ATM switches). *See* ILMI
Spec, p. 3, Figure 1. ILMI Spec also discusses communication between "ATM Device A" and
"ATM Device B" over an ILMI interface. *See* ILMI Spec, p. 78, Figure 6 and third last
paragraph. "ATM Device A" and "ATM Device B" in ILMI Spec each includes its own IME.
Id. ILMI Spec further states that "an SNMP proxy-agent [in "ATM Device A"] … accepts
SNMP requests from an NMS and relays them to the appropriate [its own] IME for processing as
… local operations… or … to its **peer** IME [in "ATM Device B"] for remote processing." ILMI
Spec, p. 78, third last paragraph (emphasis added). Given the teaching of ILMI Spec that the
IME in "ATM Device A" and the IME in "ATM Device B" are in a peer relationship, "ATM

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Device A" and "ATM Device B" in ILMI Spec are all either ATM switch devices or, at most, router devices that belong to the same network of either switches or routers. ILMI Spec does not, however, teach or suggest that "ATM Device A" is a switch of a switch network while "ATM Device B" is a router of a router network, much less that the router network is managed by a local area network management system while the switch network is managed by a wide area network management system that is separate from the local area network management system. Therefore, ILMI Spec fails to show the above-quoted elements of amended claim 1.

The arguments in favor of the patentability of claim 1 similarly apply to independent claims 17, 33, 49, and 81-83.

For at least the reasons stated above, Applicants respectfully submit that neither Crooks nor ILMI Spec, alone or in combination, teaches or suggests all the elements recited in amended claims 1, 17, 33, 49, and 81-83. Thus, Applicants respectfully request that the rejection of claims 1, 17, 33, 49, and 81-83 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Claims 2-6, 9-12, 14, 19, 22-26, 29-32, 35, 38-42, 45-48, 50, 53-58, and 61-64 depend from their respective independent claims 1, 17, 33, and 49 and may include an additional, patentable subject matter. Thus, for at least the reasons stated with respect to independent claims 1, 17, 33, and 49, Applicants respectfully request that the rejection of claims 2-6, 9-12, 14, 19, 22-26, 29-32, 35, 38-42, 45-48, 50, 53-58, and 61-64 under 35 U.S.C. § 103(a) also be reconsidered and withdrawn.

New Claims

Claims 84 and 85 are new. Claims 84 and 85 depend from independent claims 1 and 17, respectively, and may include an additional, patentable subject matter. In particular, neither Crooks nor ILMI Spec, alone or in combination, teaches or suggests "the switch is to send the message to the router before the switch receives a request for the address registration information from the router," as recited in claim 84, or "the router is to send the message to the switch before the router receives a request for the address registration information from the switch," as recited in claim 85.

ILMI Spec discusses a "proxy approach" for communicating between two ATM devices. *See* ILMI Spec, pp. 78-79. In particular, under ILMI Spec's approach, the proxy-agent in "ATM

device A" receives a request for (local or remote) ATM Interface data from a NMS (network management system). *See* ILMI Spec, pp. 78-79, Figure 6 and section A.3 The Proxy Approach. In order to access a (local or remote) ILMI MIB, the proxy-agent in ATM device A then forwards the request either to its local proxy-target located in the same ATM device A or to a remote proxy-agent located in a neighboring "ATM device B." *Id.* Accordingly, under ILMI Spec's approach, only when the proxy-target in either ATM device A or ATM device B receives the request from the proxy-agent in ATM device A, does the proxy-target "perform[s] the SNMP operation with respect to its defined MIB view, and send[s] a response to the proxy-agent, which in turn sends it to the NMS." ILMI Spec, p. 79, fourth paragraph. Given the teaching of ILMI Spec that the remote proxy-target in ATM device B (the alleged switch) needs to receive the request from the proxy-agent in ATM device A (the alleged router) before sending the response (the alleged message) back to the proxy-agent (*see also* Office Action, p. 8, lines 8-12 and last three lines), ILMI Spec fails to show the above-quoted elements of claim 84. The arguments in favor of the patentability of claim 84 similarly apply to claim 85.

For at least the reasons stated above, Applicants respectfully request that claims 84 and 85 be considered and allowed.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone the undersigned representative at (612) 371-2151 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 8th day of February, 2010.

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Jonathan Ferguson